

**ABSTRACT OF THE DISCLOSURE**

An apparatus and method for encoding/decoding a transport format combination indicator (TFCI) in a CDMA mobile communication system. In the TFCI encoding apparatus, a one-bit generator generates a sequence having the same symbols. A basis orthogonal sequence generator generates a plurality of basis orthogonal sequences. A basis mask sequence generator generates a plurality of basis mask sequences. An operation unit receives TFCI bits that are divided into a first information part representing biorthogonal sequence conversion, a second information part representing orthogonal sequence conversion, and a third information part representing mask sequence conversion and combines an orthogonal sequence selected from the basis orthogonal sequence based on the second information, a biorthogonal sequence obtained by combining the selected orthogonal sequence with the same symbols selected based on the first information part, and a mask sequence selected based on the biorthogonal sequence and the third information part, thereby generating a TFCI sequence.